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Product datasheet for RC202389

Frequenin (NCS1) (NM_014286) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Frequenin (NCS1) (NM_014286) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Frequenin
Synonyms:	FLUP; FREQ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC202389 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGAAATCCAACAGCAAGTTGAAGCCCGAAGTTGTGGAGGAGCTGACCAGGAAGACCTACTTTACCG
AGAAGGAGGTCCAGCAGTGGTACAAAGGCTTCATCAAGGACTGCCCCAGTGGGCAGCTGGATGCGGCAGG
CTTCCAGAAGATCTACAAGCAATTCTTCCCGTTCGGAGACCCCACCAAGTTTGCCACATTTGTTTTCAAC
GTCTTTGATGAAAACAAGGACGGGCGAATTGAGTTCTCCGAGTTCATCCAGGCGCTGTCGGTGACCTCAC
GGGGAACCCTGGATGAGAAGCTACGGTGGGCCTTCAAGCTCTACGACTTGGACAATGATGGCTACATCAC
CAGGAATGAGATGCTGGACATTGTGGATGCCATTTACCAGATGGTGGGGAATACCGTGGAGCTCCCAGAG
GAGGAGAACACTCCTGAGAAGAGGGTGGACCGGATCTTTGCCATGATGGATAAGAATGCCGACGGGAAGC
TGACCCTGCAGGAGTTCCAGGAGGGGTCCAAGGCAGACCCGTCCATTGTGCAGGCGCTGTCCCTCTACGA
CGGGCTGGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202389 protein sequence
Red=Cloning site Green=Tags(s)

MGKSNSKLKPEVVEELTRKTYFTEKEVQQWYKGFIKDCPSGQLDAAGFQKIYKQFFPFGDPTKFATFVFN
VFDENKDGRIEFSEFIQALSVTSRGTLDEKLRWAFKLYDLDNDGYITRNEMLDIVDAIYQMVGNTVELPE
EENTPEKRVDRIFAMMDKNADGKLTLQEFQEGSKADPSIVQALSLYDGLV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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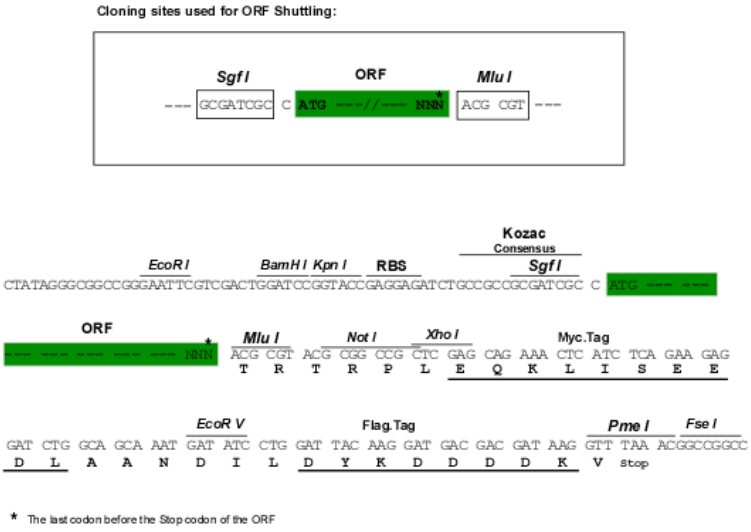
Chromatograms: https://cdn.origene.com/chromatograms/mk6085_c11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014286

ORF Size: 570 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM_014286.2, NP_055101.2

RefSeq Size: 5009 bp

RefSeq ORF: 573 bp

Locus ID: 23413

UniProt ID: P62166

Cytogenetics: 9q34.11

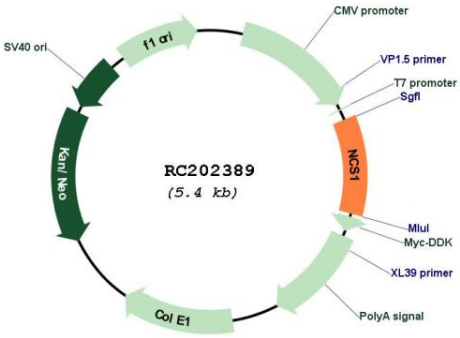
Domains: EFh

Protein Families: Druggable Genome

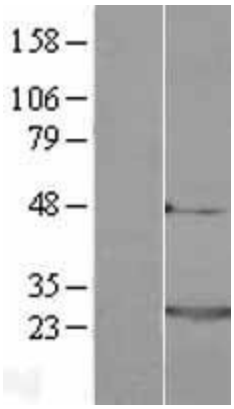
MW: 21.9 kDa

Gene Summary: This gene is a member of the neuronal calcium sensor gene family, which encode calcium-binding proteins expressed predominantly in neurons. The protein encoded by this gene regulates G protein-coupled receptor phosphorylation in a calcium-dependent manner and can substitute for calmodulin. The protein is associated with secretory granules and modulates synaptic transmission and synaptic plasticity. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

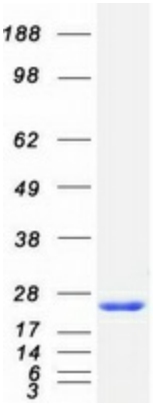
Product images:



Circular map for RC202389



Western blot validation of overexpression lysate (Cat# [LY402303]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202389 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NCS1 protein (Cat# [TP302389]). The protein was produced from HEK293T cells transfected with NCS1 cDNA clone (Cat# RC202389) using MegaTran 2.0 (Cat# [TT210002]).